



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,466	01/21/2004	Carl J. Ledbetter	003797.00717	1396
28319	7590	01/26/2005	EXAMINER	
BANNER & WITCOFF LTD., ATTORNEYS FOR MICROSOFT 1001 G STREET, N.W. ELEVENTH STREET WASHINGTON, DC 20001-4597			LAO, LUN YI	
			ART UNIT	PAPER NUMBER
			2673	
DATE MAILED: 01/26/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/760,466

Applicant(s)

LEDBETTER ET AL.

Examiner

Lao Y Lun

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/17/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-49 of U.S. Patent Application No.10/184,000. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both claim an input device for scrolling comprising a housing having at least one opening ; finger control member(scrolling wheel) being rotatable about a first axis and being pivotally movable about a second axis which is perpendicular to the first axis.

3. Claims 1-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Patent Application Publication No.10/382,652. Although the conflicting claims are not

Art Unit: 2673

identical, they are not patentably distinct from each other because they both claim an input device for scrolling comprising a housing having at least one opening ; finger control member(scrolling wheel) being rotatable about a first axis and being pivotally movable about a second axis which is perpendicular to the first axis.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 13 –15 are rejected under 35 U.S.C. 102(b) as being anticipated by Naoyuki(JP 2000-200147).

As to claims 13-15, Naoyuki teaches an input device for scrolling an image on a display comprising a housing and a scroll wheel(202 or 212) being rotatable relative to the housing about an axis to causing the image in a first direction(vertical direction, 200a, 200b or 210a, 210b) and the scrolling wheel being pivotally displaceable relative to the housing cause scrolling in a second direction(horizontal direction, 210c, 210d)(see figures 1-5 and paragraphs 8-14).

As to claim 15, Naouuki teaches the input device is a mouse(see figures 4-5).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naoyuki(JP 2000-200147).

It would have been obvious to mounted a scrolling wheel on a keyboard since Naoyuki teaches a scrolling input device (850) could mounted on a keyboard(see figure 17 and paragraphs 70-71) and to eliminate a mouse input on a computer system.

8. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pruchniak(6,075,518) in view of Naoyuki(JP 2000-200147).

As to claims 1-8 , Pruchniak teaches an input device for scrolling on a display comprising a housing having at least one opening; a scroll wheel aseembly(50, 54, 32, 40, 20, 24) having a rotating member(5) being rotatable about a first axis(54) and being pivotally movable about a second axis(22), the first axis and the second axis being perpendicular to each other; and a movement sensing system(60, 34) for sensing rotational movement of the rotating member(50) of the first axis and sensing pressured applied to the rotating member(50) for pivotal movement(see figures 1-2; column 3, lines 11-68 and column 4, lines 1-26).

Pruchniak teaches an input device for scrolling an image on a display on one direction(e.g vertical direction)(see figures 1-2 and column 1, lines 57-62). Pruchniak fails to disclose an teaches an input device for scrolling an image on a display on another direction(e.g. horizontal direction) which is perpendicular to the first axis.

Naoyuki teaches a scrolling wheel input device(202 or 212)for scrolling an image on a display along perpendicular axes(see figures 4-5 and paragraphs 8-14). It would have been obvious to have modified Pruchniak with the teaching of Naoyuki, since they both teach scrolling wheel input devices having rotation and pivot functions and Pruchniak's scrolling input device modified by Naoyuki would provide a scrolling input device for users to scroll images on a display in any direction as they want.

As to claim 4, Pruchniak teaches the scroll wheel assembly(50, 54, 40, 32, 20, 24) having a shaft member along the first axis and the rotation member(50) and shaft member being pivotally movable about the second axis(22)(see figures 1-2 and column 3, lines 20-55).

As to claim 6, Pruchniak teaches a shaft supporting system(54, 40, 32, 20, 24) for permitting shaft member and the rotatable member(50) to float within the housing(see figures 1-2 and column 3, lines 49-55).

As to claim 7, Pruchniak teaches the shaft supporting system(54, 40, 32, 20, 24) having a pair of arms(40) for supporting a portion of the shaft(54) and a resilient member(32)positioned between each the cradle(20 or 24) and the housing for supporting a respective one of the cradles within the housing(see figures 1-2 and column 3, lines 20-55).

As to claim 8, Pruchniak teaches a scroll wheel assembly(50, 54, 40, 32, 20, 24) having a bracket(40)(see figure 1).

9. Claims 9-12 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pruchniak(6,075,518) in view of Naoyuki(JP 2000-200147).

As to claims 9-12 and 17-20, see the discussion of Pruchniak above. Pruchniak fails to control a scrolling speed correspond to the pressure sensing step.

Naoyuki teaches a scrolling input device for controlling the scrolling speed by sensing the pressure applied to the input device(see figures 1-6, 9-11; abstract and paragraphs 39-45). It would have been obvious to have modified Pruchniak with the teaching of Naoyuki, since to apply pressure on a scrolling device to control scrolling speed is more easy and precise than to use scrolling wheel rotation speed because controlling the wheel rotation speed is difficult to achieve by a finger manipulation.

As to claims 12, 19 and 20, Naoyuki teaches horizontal scrolling in response to the pivotally moving step(see figures 4-5 and paragraphs 8-14).

10. Claims 9-11 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pruchniak(6,075,518) in view of Armstrong(6,198,473).

See the discussion of Pruchniak above. Pruchniak fails to control a scrolling speed correspond to the pressure sensing step.

Armstrong teaches a scrolling input device for controlling the scrolling speed by sensing the pressure applied to the input device(107, 108)(see figure 1-4, 7-13; column 11, lines 1-15; column 13, lines 5-48 and column 18, lines 9-51). It would have been obvious to have modified Pruchniak with the teaching of Armstrong, since to apply

Art Unit: 2673

pressure on a scrolling device to control scrolling speed is more easy and precise than to use scrolling wheel rotation speed because controlling the wheel rotation speed is difficult to achieve by a finger manipulation.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kehlstade et al(US 20030107547) teaches a mouse having a scrolling wheel with switches(14, 16) mounted closed to the scrolling wheel.

Lin(6,608,616) teaches a mouse having a scrolling wheel(11).

Shinohe et al(6,697,050) teach a scrolling wheel.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi, Lao whose telephone number is (703) 305-4873.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at (703) 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

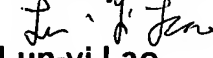


Art Unit: 2673

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

January 22, 2005

  
**Lun-yi Lao**  
**Primary Examiner**